IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of: Antonio Asaro et al.	Examiner: Paul R. Myers
Application No.: 10/074,064	Group Art Unit: 2111
Filed: February 12, 2002	Docket No.: 00100.00.0130
For: **METHOD AND APPARATUS FOR A DATA BRIDGE IN A COMPUTER SYSTEM**	

APPELLANTS' REPLY BRIEF IN RESPONSE TO EXAMINER'S ANSWER

Dear Sir:

This Reply Brief is in response to the Examiner's Answer mailed March 17, 2009.

Appellants wish to thank the Examiner for the "Response to Argument" portion of the Examiner's Answer. However, Appellants respectfully submit that the remarks appear to misapprehend the actual teachings of the Prabhu reference and appear to mischaracterize the claim language.

As to claims 1, 4-9, 19, 22-23 and 25-27, the Examiner's Answer alleges that Appellants are trying to redefine the word "configured to not include writing data to a configuration register." The Examiner's position is that "when a configuration register is populated with data values this is called configuring. Anytime a configuration register is populated with data values the register is "configured"." (Examiner's Answer, page 8). Appellants respectfully disagree and note that configuration registers as known in the art have contents which are used to configure not the configuration register itself, but instead are used to configure the system in which they reside, such as a computer system. For example, the IEEE Standards Dictionary, 7th Edition defines "configuration registers" as "a device A16 registers that are required for the system configuration process" (page 217) (emphasis added). As such, the data values within the

register are used for system configuration. The registers are not called "configuration registers" because they are themselves "configured". To the contrary, the stored values therein are used to configure other subsystems of a larger system. Accordingly, Appellants respectfully submit that the Examiner's interpretation is inconsistent with the references and Appellants' Specification and with the ordinary meaning of configuration register and as such, Appellants respectfully submit that the rejection must be reversed.

In addition, the office action cites to the American Heritage Dictionary, 3rd Edition to define the word "configure". Appellants again respectfully submit that the Examiner's application of this definition is again inconsistent with the Appellants' Specification and with the cited references. The definition cited actually supports Appellants' position since the contents or data stored in the configuration registers are used to arrange or set up subsystems. Appellants are referring to the base address registers of Gillespie as not needing to be configured, they are simply populated. Configuring registers is different from populating a "configuration register". As Appellants' Specification states, the configuring of a register is to be configured as a read and/or writable based on, for example, read/write mask values that are stored in the read only memory of the data bridge, for example. Initial values are also stored in ROM. Appellants also respectfully note that, for example, claim 25 and others require that the data bridge forms base address registers as a function of initial values and mask values stored in the storage device. Claim 1 also requires that the read only memory has not only initial values, but mask values for each ASIC of the plurality of ASICs.

Appellants also respectfully note with regard to Gillespie that "there is no need for mask values that configure registers to be read and/or writable" Appellants respectfully submit that the claims require read only memory for storing initial values and mask values for each ASIC of a

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plurality of ASICs for example. As such, initial values are different from mask values and as set

forth in Appellants' Specification, the mask values configure registers to be read and/or writable.

As to the Surugucchi remarks, Appellants again respectfully note that Appellants'

arguments appear to be misapphrended since Surugucchi merely populates base address with

values but does not use both initial values and mask values as they do not have any need for the

combination thereof. In addition, the term "configuring configuration registers" appears to

attempt to misstate Appellants' claims and the teachings of the reference since the population of

a configuration register whose contents are used to configure a system as noted above is

apparently all that Surugucchi is referring to. Also, with respect to Surugucchi, the claims

require both initial values and mask values. Appellants claimed initial values appear to be the

"mask values" referred to in Surugucchi.

As to claim 28, Appellants respectfully submit that the Prabhu reference is being

mischaracterized. The cited portion of Prabhu states:

> The register block 204 is essentially a specialized group
> of memory locations which are read and written by the core
> execution block 206 and the input/output buffer 208.
> Typically, registers are designated as either general purpose
> registers or control and status registers. General purpose
> registers hold data and address information and are manipu-
> lated by the instructions running in the CPU 106. General
> purpose registers can be further categorized as either integer
> registers or floating-point registers. Often, the integer reg-
> isters are only visible to the integer execution unit (IEU) 210
> and the floating-point registers are only visible to the
> floating-point and graphics unit (FGU) 212. Status and
> control registers contain condition and control codes relating
> to the processor's operation. Although some status and
> control registers can be modified by program instructions,
> many registers may be configured as read only.

The Examiner's Answer appears to take the wording out of context in an attempt to give

the wording a meaning that is not supported by the Prabhu reference. A reading of the entire

paragraph set forth above states that the status and control registers can be modified by program

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instructions and hence refers to the fact that the registers may be writable. However, other registers may be read only registers. The use of the word "configured" in this context means that there are different sets of registers. Some portions are designed at manufacture to be read only registers while others writable registers. The cited portion does not refer in any way to utilizing initial values and mask values to form configurable registers so that registers may be read and/or writable based on mask information and configuration logic. There are no mask flops that generate a mask bit for any configuration logic set forth in Prabhu. There is no need for such structure since the status and control registers being referred to in Prabhu are used to control the processor's operation inside the CPU and the CPU does not have the ability to control which control registers are going to be readable and which are going to be writable. Appellants respectfully submit that the claimed subject matter is not inherent in Prabhu and Prabhu makes no mention of this structure. To the contrary, Prabhu merely states that conventional process hardware design is used which as known in the art includes register sets that are either writable or readable as configured by the manufacture of the processor. There are no mask flops or mask bits for register configuration logic contemplated by Prabhu. (See also col. 9, lns. 1-11 of Prabhu).

   Appellants respectfully request that the Examiner's rejection be reversed.

<div align="right">Respectfully submitted,</div>

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